

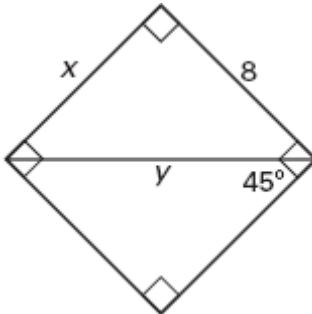
Geometry

9.4 Assignment: Special Right Triangles (pp 551-3)

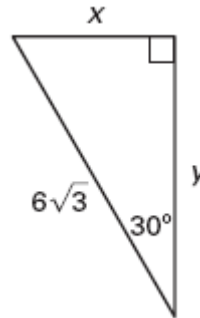
1. What is your name?

Find the value of each variable. Write answers in simplest radical form.

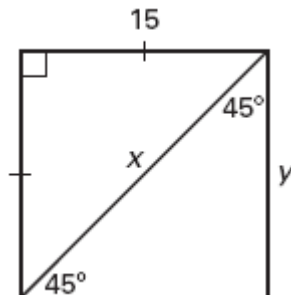
2.



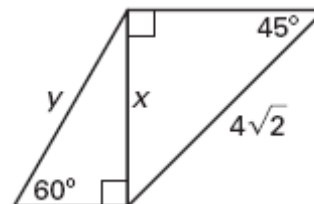
3.



4.



5.



Sketch the figure that is described. Find the requested length, perimeter, or area. Round decimals to the nearest tenth.

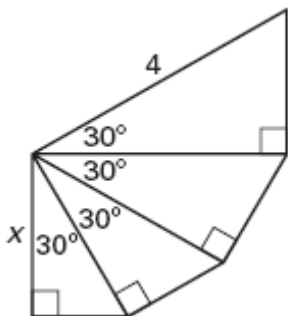
6. The altitude of an equilateral triangle is 12 centimeters. Find the perimeter of the triangle.

7. The diagonal of a square is 8 inches. Find the area.

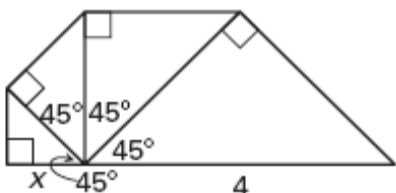
8. The perimeter of a rectangle is 66 centimeters. The length is twice the width. Find the length of the diagonal.

9. The perimeter of an equilateral triangle is 36 inches. Find the length of an altitude.

10. Each figure is a $30^\circ - 60^\circ - 90^\circ$ triangle. Find the value of x .

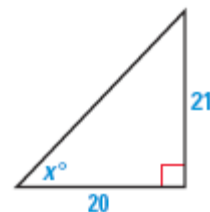


11. Each figure is a $45^\circ - 45^\circ - 90^\circ$ triangle. Find the value of x .



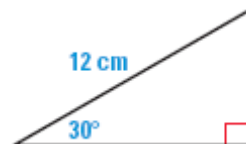
12. _____ Which of the statements is true about the diagram?

- A. $x < 45$
- B. $x = 45$
- C. $x > 45$
- D. $x \leq 45$
- E. Not enough information is given to determine the value of x .



13. _____ Find the perimeter of the triangle shown to the nearest tenth of a centimeter.

- A. 28.4 cm
- B. 30 cm
- C. 31.2 cm
- D. 41.6 cm



Review.

14. A triangle has one side of 9 inches and another of 14 inches. Describe the possible lengths of the third side. (Chapter 5 Section 5)

Find the coordinates of the reflection without using a coordinate plane. (Chapter 7

Section 2)

15. $Q(-1, -2)$ reflected in the x-axis.

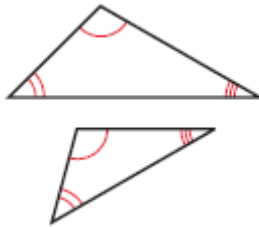
16. $P(8, 3)$ reflected in the y-axis.

17. $A(4, -5)$ reflected in the y-axis.

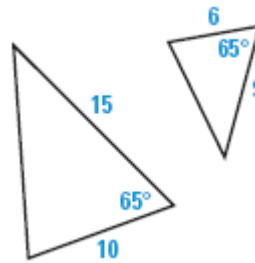
18. $B(0, 10)$ reflected in the x-axis.

Name a postulate or theorem that can be used to prove that the two triangles are similar. (Chapter 8 Section 5)

19.



20.



21.

